This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

What is claimed is:

1. (currently amended) A reconfigurable leg and wheel device, comprising:

an array of components joined in series configurable as i) ~~a single~~ an articulated leg with an upper leg pivotally coupled at an axis to a body , ~~and~~ a lower leg pivotally coupled to the upper leg, and a foot pivotally coupled to the lower leg, the upper leg, the lower leg and the foot ~~the upper and lower legs~~ movable with respect to one another in a walking motion, and reconfigurable as ii) a wheel with the ~~components~~ upper leg, the lower leg and the foot forming a circular outer surface and being rotatable about an axis in a rotational motion.

2. (original) A device in accordance with claim 1, wherein the array of components further includes:

a plurality of semi-circular segments combinable to form a substantially continuous circular surface configured to make rolling contact with a support surface.

3. (cancel).

4. (original) A device in accordance with claim 1, wherein the array of components includes:

a) at least two leg segments having semi-circular portions; and

b) at least one intermediate leg segment interconnecting the at least two leg segments.

5. (original) A device in accordance with claim 1, further comprising:

at least one actuator, coupled between at least two of the components, to articulately move the components with respect to each other in the walking motion, and to reconfigure the components as the wheel.

6. (original) A device in accordance with claim 1, further comprising:

a circular cap, disposable over the components when reconfigured as the wheel.

7. (original) A device in accordance with claim 1, wherein one of the components is coupled to the axis and remaining components extend sequentially around the axis when reconfigured as the wheel.

8. (original) A device in accordance with claim 1, wherein at least one of the components extends transversely to the wheel when the components are reconfigured as the wheel.

9. (currently amended) A combined and transformable wheel and leg device, comprising:

a) a plurality of leg segments pivotally joined in series ~~to form a single leg~~;

b) the leg segments including ~~a plurality of~~ at least two leg segments having semi-circular portions;

c) at least one intermediate leg segment interconnecting the at least two leg segments; and

c) the leg segments defining at least two configurations, including:

i) a leg configuration in which the leg segments are movable with respect to one another; and

ii) a wheel configuration in which the leg segments are rigidly affixed with respect to one another, and the semi-circular portions are combined to form a substantial circular outer surface, and being rotatable about an axis in a rotational motion.

10. (original) A device in accordance with claim 9, wherein the plurality of leg segments further includes:

a) an upper leg pivotally coupled at the axis to a body;

b) a lower leg pivotally coupled to the upper leg; and

c) a foot pivotally coupled to the lower leg.

11. (cancel).

12. (original) A device in accordance with claim 9, further comprising:

at least one actuator, coupled between at least two leg segments, to move the leg segments with respect to each other in the leg configuration.

13. (original) A device in accordance with claim 9, further comprising:

a circular cap, disposable over the leg segments in the wheel configuration.

14. (original) A device in accordance with claim 9, wherein one of the leg segments is coupled to the axis and remaining leg segments extend sequentially around an axis in the wheel configuration.

15. (original) A device in accordance with claim 9, wherein at least one of the leg segments extends transversely to one of the other leg segments in the wheel configuration.

16. (original) A combined and transformable wheel and leg device, comprising:

a) an array of leg segments pivotally joined in series, including at least:

i) an upper leg pivotally coupled at an axis to a body; and

ii) a lower leg pivotally coupled to the upper leg;

b) a plurality of semi-circular portions, associated with at least some of the leg segments;

c) the leg segments defining at least two configurations, including:

i) a leg configuration in which the leg segments are movable with respect to one another; and

ii) a wheel configuration in which the leg segments are rigidly affixed with respect to one another, and the semi-circular portions are combined to form a substantial circular outer surface, and being rotatable about an axis in a rotational motion.

d) actuators, coupled between adjacent leg segments, to move the leg segments

with respect to each other in the walking configuration.

17. (original) A device in accordance with claim 16, wherein the plurality of leg segments further includes a foot pivotally coupled to the lower leg.

18. (original) A device in accordance with claim 16, wherein the plurality of leg segments further includes at least one intermediate leg segment interconnecting the upper and lower legs.

19. (original) A device in accordance with claim 16, further comprising:

a circular cap, disposable over the leg segments in the wheel configuration.

20. (original) A device in accordance with claim 16, wherein remaining leg segments extend from the upper leg sequentially around an axis in the wheel configuration.

21. (original) A device in accordance with claim 16, wherein at least one of the leg segments extends transversely to one of the other leg segments in the wheel configuration.

22. (cancel).

23. (new) A reconfigurable leg and wheel device, comprising:

an array of components joined in series configurable as i) an articulated leg with the components movable with respect to one another in a walking motion, and reconfigurable as ii) a wheel with the components forming a circular outer surface and being rotatable about an axis in a rotational motion; one of the components being coupled to the axis and remaining components extend sequentially around the axis when reconfigured as the wheel.